2

Index to Volume XXXVI

G38
774

JANUARY TO JUNE

1916

The Journal of Electricity, Power and Gas

Published by the Technical Publishing Company

San Francisco, California

TK1
.E495

Index to Volume XXXVI

Illustrated articles are designated by an asterisk (*), editorial by dagger (†), and industrials by double dagger (‡).

Page

A

†Absorption of Industrial Transients, Safe 249
Accident Preventive, Good Lighting as 189
Accounting Methods, Standard 285
†Accrued Depreciation, Crude Determination of 193
Act, Postal Savings 466
Actual Performance Method of Appraisal 359
*Adapter Resistance 442
†Advice to the Electrical Dealer, A Word of 439
Agricultural Demonstration Train, Utah-Nevada 346
A. I. E. E. Meetings..41, 61, 305, 381
A. I. E. E. and N. E. L. A. Section, Portland 251
Alameda County Electrical Development League 60
Alternators, Parallel Operation of 351
American Association for the Advancement of Science, Pacific Division 305
America's Electrical Week 223
America's Electrical Week Poster Competition 289
Analysis of Oil Gas Tar 115
†Ancient Fable and Its Application 438
Annual Report of the Bureau of Standards 75
Answer to Gifford Pinchot 387
†Anticipating Complaints 94
Applications to California Water Commission....41, 99, 181, 252, 345
Appraisal, The Actual Performance Method of 359
Apprehension Regarding the National Electrical Safety Code.. 472
†Aptitude 457
*Aqueduct Power Plant, Los Angeles 481
Arizona Corporation Commission, News of.....61, 270, 363, 477
*Arizona, Hydroelectric Irrigation in 106
Army and Navy, Engineering Advice for 77
Artificial Eye 285
Assurance, Factors of 249
Attributes of Success 93
*Auditorium, Illumination of Oakland's 255
*Auxiliary Water Supply, P.P.I.E. 81

B

*Bake Ovens at Salt Lake City, Electric 37
Baseball, Electrical League 346, 364, 382, 422, 441, 460
†Beauty, Enhancing Utility by ... 192
Bell Telephone System 340
†Better Lighting 286
†Bill, An Improved Water Power. 139
Boiler Tubes, Heat Transmission Through 147
Books Received..42, 79, 100, 252, 271
Break in the Seattle Pipe Line.. 212
British Thermal Unit 53
*British Columbia Hydroelectric Developments 1, 8
Bug, Cable 69
Bureau of Standards, Annual Report of 75
†Business Is Better 59
By-Laws of the Oregon Association of Electrical Contractors and Dealers 196

C

Cable Bug 69
*Cable Installation, Golden Gate Eleven Thousand Volt 202
Cable Splicing, Underground 265
*Cables Across San Francisco Bay, Laying Power 428
*Cafeteria, Electric Cooking in a. 280
California Association of Electrical Contractors and Dealers. 97, 194, 269, 305, 440, 495
California Electric Railway Association 400
California Oil, Origin of 337
California Public Utilities Act is Upheld 79
California Railroad Commission, News of.....121, 162, 179, 217, 270, 306, 326, 364, 381, 441, 459, 477
†California Section of the National Association of Electrical Inspectors 194, 399
California Water Commission Applications 41, 99, 181, 252
Campaign, National Electric Range 334
Capacity of a Motor 117
Capitalization of Power Sites, Prohibiting 146
Care and Operation of Diesel Engines 14, 30
†Cash Value of Engineering Research 266
†Catalytic, The Technical Journal as a 287
Celebration by Nevada Engineering Students 269
Cells, Polarization of Leclanche.. 15
Census, Gas 491
†Change in Fashion of Engineers 158
Changes at Gatun Hydroelectric Station 354
†Chemical Industry Electrifying Western 177
China, Electric Generating Stations in 207
City's Right to Nullify a Franchise 137
Civil Service Examinations 61
CO_2 Recorders, Trouble With 389
Coal, Powdered 168
Coals, Producer Gas Power From Northwestern 264
Cobalt Plating 137
*Columbia River, The Meteorological Conditions Causing the Flood of 1894, etc 9, 33
*Columbia River Power Project, Report on 9, 33, 54, 67, 90, 110, 135, 151, 169, 187, 210, 225
†Combination Gas & Electric Range 460
Commendable Inspection Report 321
†Commendable Pension Plan 322
Commercial Situation 148
*Commercial Success of Rittman Process 183
Commission Regulation of Municipal Utilities 468
Committee on Electrical Safety Rules 268
Communication With Tahiti, Wireless 246
†Community Interest, Occupational Versus 456
Competition, America's Electrical Poster Week 289
†Compiaints, Anticipating 94
Concatenation of Motors 137
Concrete, Iron Conduit in 485
Condemnation Hearing, Los Angeles Edison 20, 57, 98
*Condensers and Condenser Tubes, Steam 73
*Condenser Potentiometer in High Voltage Investigations 116
Conduit in Concrete 485
†Confidence, An Example of Public 302
†Confidence, Mutuality of 267
Constitution and By-Laws of the Oregon Association of Electrical Contractors and Dealers 196
†Contracting, Profitable Electrical 474
Contracts, Electrical, Portland, Ore. 121, 219
†Contractor, Helping the Electrical 192
Contractors Organize, Washington 218
Construction Started on Wise and Halsey Plants 179
Convention, Preparations for N. E. L. A. 364
Construction, The Slump in Hydroelectric 109
†Cooking by Wire 419
Cooking, Electric 224
*Cooking in a Cafeteria, Electric. 280
*Cooking School at Salt Lake City, Electric 375
Co-operative Electric Range Sales Campaign 285
Copper for Aluminum, Substituting 72
Copper Smelter, Electric 231
†Corporate Friendship 492
†Costs, Importance of Knowing... 214
†Costs, Increase in Supply 232
Costs of Electric Irrigation Pumping Equipment 473
†Credits, Standardizing Rural 58
Criticism of Ferris Bill 355
†Crude Determination of Accrued Depreciation 193

D

*Dalles, Oregon, Feasibility of Electrochemical Industries, ...367, 390, 430, 453
*Dam, Grouting for the Klamath River 309
*Dam, Medlow 358
†Dealer, Need for Teaching the. 286, 321
Deaths, Reduced, Industrial 363
†Decision, The San Joaquin Rate. 303
†Decline in Water Power Development 118, 174
†Defining an Engineer 267
Del Monte, Electrical Jobbers at. 217
Depreciation as an Element in Rate Making 184
†Depreciation, Crude Determination of Accrued 193
Deterioration of Electric Apparatus, Increasing Load Factor in Order to Decrease 224
*Developing Electric Range and Heating Business 350
†Development, The Decline in Water Power 118, 174
†Developments, Electrochemical ... 39
*Diesel Engine Practice....14, 30, 50, 70, 88, 110, 148, 173, 190, 207
†Display Room, Uses of a 360
*Distribution of Potential About High Voltage Line Insulators. 468
Domestic Electric Ranges 327
†Dual Preparedness 397

E

Earlier Types of Engines, Care and Operation of 14, 30
Edison Condemnation Hearing, Los Angeles 20, 57, 98
*Effective Lighting of a Retail Store 87
Efficiency in Industry 449
Efficiency, Man's 284
Electrical League Baseball...346, 460
Electric Apparatus, Increasing Load Factor in Order to Decrease Deterioration of 224
Electric Appliances and Ranges, P. S. & E. Co.'s New Policy Regarding 382
Electric-Arc Furnace, Some Faults of the Small 376
*Electric Bake Ovens at Salt Lake City 37
Electric Cooking 224
*Electric Cooking in a Cafeteria. 280
*Electric Cooking School at Salt Lake City 375
Electric Copper Smelter 231
*Electric Enterprises in Japan 385
Electric Generation Stations in China 207
Electric Heater, Hospital Finds Novel Use for 442
Electric Heaters and Ranges, Hazards of 436
†Electric House Heating 138
Electric House Heating System.. 137
Electric Iron Ore Smelting 15
Electric Irrigation Pumping Equipment, Costs of 473
Electric Irrigation Pumping in Idaho 227, 241
Electric Piano Week 168
Electric Plants, Fire Protection of 392, 411
Electric Pole Nuisance 133
Electric Power Irrigation Pumping by 259
*Electric Range and Heating Business, Developing 350
Electric Range Campaign, National 334
Electric Ranges, Domestic 327
†Electric Range, Increasing the Range of 176, 231
Electric Range Committee, Report of N. E. L. A....433, *451, 466
Electric Range, Rhyme of 373
Electric Range Sales Campaign, Co-operative 285
†Electric Range Week, Suggestions for an 323
Electric Steel Industry 117
Electric Supply Jobbers' Association 178
*Electric Water Heating Off the Peak, Keeping 186
†"Electrical" Architect, Eliminating the 267
Electrical Contracts, Portland, Ore. 121
†Electrical Contracting, Profitable 474

Page

†Electrical Contractor, Helping the 192
†Electrical Dealer, A Word of Advice to the 439
Electrical Development and Jovian League 60, 78, 96, 121, 178, 288, 304, 362, 399, 420 440
*Electrical Fire Protection, San Francisco's 45
Electrical Installation on Inspected Vessels 450
Electrical Jobbers at Del Monte. 217
Electrical League Baseball at San Francisco 346, 364, 382, 422, 441
Electrical Safety Rules, Committee Report on 268, 472
Electrical Supplies Industry of Japan 66
Electrical Week, America's 223
Electrical Week Poster, Competition, America's 289
Electricity at the Front 301
†Electrifying Western Chemical Industry 177
Electro-Chemical Co., The Great Western 230
†Electrochemical Developments 39
*Electrochemical Industries, Feasibility of at The Dalles. 367, 390, 430
*Electrochemical Possibilities, Pacific Coast 164
Electrochemistry at The Dalles, Feasibility of 367, 390, 411, 453
Electrolysis Mitigation 75
*Electro-metallurgy, Feasibility of Western 237, 262, 282, 296, 316, 331
*Eleven Thousand Volt Cable Installation, Golden Gate 202
†Eliminating the "Electrical" Architect 267
Employees' Obligation 247
†Employment Departments, Need for 233
†Engineer and the Weather 493
Engineer Battalion for Mexican Service 494
*Engineering, Military 292, 314, 338
†Enginering Preparedness, Need for 475
*Engines, Modern 70
*Engine Practice, Diesel 14, 30, 50, 70, 88, 110, 148, 173, 190, 207
Engine Safety Orders, Hearing on 326
†Engineering Advice for Army and Navy 77
†Engineering Feat, Remarkable 322
Engineering Meeting at San Francisco, Joint 459
†Engineering Preparedness 157
†Engineering Research, the Cash Value of 266
†Engineers, Change in Fashion of. 156
*Engineers' Club, San Francisco, Housewarming 40
Engineers' Corp of California 420
†Engineer Defining an 267
†Engineer? What is 119
†Enhancing Utility by Beauty 192
*Enterprises in Japan, Electric 385
Epoch-making Inventions 15
Evaluation of Portland Railway, Light & Power Co. 488
Examinations, Civil Service 61
Examination for Junior Electrical Engineer 421
Examination for Valuation Analyst 326
†Example of Public Confidence 302
Exclusive Selling Agreements, Legality of 340
†Experiment, Foredoomed 379, 394
*Exposition Transformer, Million Volt 143
Extraordinary National Institute Meeting 400
Eye, Artificial 285

F

†Factor of Assurance 249
†Fashion of Engineers, Change in 156
Faults of the Small Electric Arc Furnace, Some 376
*Feasibility of Electrochemical Industries at The Dalles, Oregon. 367, 390, 413, 430, 453
*Feasibility of Western Electro-metallurgy 237, 262, 282, 296, 316, 331
Feed Water Heaters 137
Ferris Bill, Criticism of 137
Ferris Bill 57
Feris Bill 57
Ferro-alloys 316
Field Water Purification Plant 318
Fire Protection of Electric Plants 392, 411
*Fire Protection, San Francisco's Electrical 45
*Flood Control, Problem of 135, 151, 169
*Flood Lighting of "Julius Caesar" 442
Flow of Water in Irrigation Channels 212
†Foredoomed Experiment 379, 394
Franchise, A City's Right to Nullify a 137
†Friendship, Corporate 492
Front, Electricity at the 301
Functions of Municipal Inspection Bureaus 22
†Fundamentals, Valuation 76
Furnace, Some Faults of the Electric-Arc 376
Fuses, Refillable 69
†Futility of Illegal Utility Contracts 360

G

Gas Census 491
Gas-Filled Lamps, Photometry of the 318
Gas Power for Northwestern Coals, Producer 264
Gasoline from Shale 243
Gatun Hydroelectric Station, Changes at 354
Generating Stations in China, Electric 207
†Getting Along With the Public 302
†Ghost That Will Not Down 95
Gilroy Lighting 473
*Golden Gate 11,000 Volt Cable Installation 202
Good Lighting as an Accident Preventive 189
Great Western Electrochemical Company 230
Great Western Power Company, N. E. L. A. Section 325, 362, 476
*Grouting for the Klamath River Dam 309
†Guidance for the Misguided 214
†Guiding Human Nature 157

H

Hazards of Electric Heaters and Ranges 436, 454
Hearing on Engine Safety Orders 326
Heater, Hospital Finds Novel Use for Electric 442
†Heating, Electric House 138
Heaters, Feed Water 137
*Heating "Off the Peak," Keeping Electric Water 186
Heating System, House 137
Heat Transmission Through Boiler Tubes 147
†Helping the Electrical Contractor 192
‡High Tension Transformers, An Improved Method of Winding 101
*High Voltage Line Insulators, Distribution of Potential About 468
*High Voltage Investigations, The Condenser Potentiometer in 116
†Honor for Pioneer Engineer 418
Hospital Finds Novel Use for Electric Air Heater 442
Hotpoint Electric Heating Co. 454
*Housewarming at Engineers' Club, San Francisco 40
†House Heating, Electric 138
House Heating System 137
†Human Nature, Guiding 157
†Humanizing Science 361
Hydroelectric Construction, the Slump in 109
*Hydroelectric Developments, British Columbia 1, 8
*Hydroelectric Development, Pacific Coast 403
Hydroelectric Development, Western Pre-eminence in 146
Hydroelectric Irrigation in Arizona 106
*Hydroelectric Plant, Merced Falls Low Head 446
Hydroelectric Plants in New Zealand, New 295
†Hydroelectric Plants, Isolated 138
Hydroelectric Plants, Out of Doors 486
Hydroelectric Station, Changes at Gatun 354

I

Idaho Phosphate Resources 243
Idaho Public Utilities Commission, News of 141, 162, 179, 270, 326, 400, 477
Idaho Wishes to Encourage Investment, Lewiston 334
Idaho Society of Engineers 178
Ignition, Spark 117
†Ignorance is not Bliss, Where 59
†Illegal Utility Contract, Futility of 360
Illuminating Devices 338
Illuminating Engineering, Lecture Course in 436
Illuminating Engineering, Lecture Course 485
Illuminating Engineering Society 380
*Illumination of Oakland's Auditorium 255
Illumination, Sales Value of 395
†Importance of Knowing Costs 214
†Importance of Plain Writing. 139, 174
‡Improved Method of Winding High Tension Transformers 101
†Improved Through Substitution. 322
†Improved Water Power Bill 139
Increase in Municipal Power Rates 340
†Increase in Supply Costs 232
Increasing Load Factor Order to Decrease Deterioration of Electric Apparatus 224
†Increasing the Range of the Electric Range 176, 231
†Individuality in Lighting 77
Inductive Interference, Some Problems of 298, 319, 340
Industrial Deaths Reduced 363
Industrial Preparedness 456
Industrial Transients, Safe Absorption of 249
Inland Waterways Asoociation of California 178
Inspection Bureaus, Functions of Municipal 22
Inspection Report, Commendable 321
†Insulator Fields, Mapping 474
*Insulators, Distribution of Potential About High Voltage Line 468
*Investigations, The Condenser Potentiometer in High Voltage 116
Investment, Lewiston, Idaho, Wishes to Encourage 334
Iron Conduit in Concrete 485
*Iron Pig 331
Irrigation Channels, Flow of Water in 212
*Irrigation in Arizona, Hydroelectric 106
Irrigation Pumping by Electric Power 259
Irrigation Pumping Equipment, Cost of Electric 473
Irrigation Pumping in Idaho, Electric 227, 241
*Irrigation Pumping, Prospective Market for 465, 489
†Isolated Hydroelectric Plants 138
Inventions, Epoch-making 15

J

*Japan, Electric Enterprises 385
Japan, Electrical Supplies Industry 66
Joint Engineering Meeting at San Francisco 459
Joint Pole Construction 117
†Journel as a Catalytic, The Technical 287
Jovian Electric League, Los Angeles 79, 96, 120, 140, 160, 179, 194, 216, 235, 269, 304, 325, 344, 363, 381, 398, 420, 476
Jovian League, San Francisco Development and 60, 78, 96, 121, 140, 159, 178, 194, 216, 235, 269, 304, 325, 344, 362, 399, 420, 440, 459
Jovian Electric League of Southern California 41, 61
Jovian Rejuvenation at Los Angeles 179
Jovian Rejuvenation, San Francisco 477
Jovian Smoker, Oakland 398
Jovian Smoker, San Francisco 251
*"Julius Caesar," Flood Lighting of 442
†Junk Pile, Profit from the 396

K

Keeping Electric Water Heating "Off the Peak" 186
*Klamath River Dam, Grouting for 309
†Knowledge, The Power of 119

L

Labor, Menace of Uncontrolled 343
*Lamp, New Triangulation Signal 374
Lamp, Photometry of the Gas-Filled 318
*Latent Waterpowers, Utilization Oregon's 275
†Law, National Water 38
*Laying Power Cables Across San Francisco Bay 428
Leclanche Cells, Polarization of 15
Lecture Course in Illuminating Engineering 436 485
Legality of Exclusive Selling Agreements 340
†Letters to the Editor 174, 231, 321, 394, 454
Lewiston, Idaho, Wishes to Encourage Investment 334
*Lewiston-Waha Power Syphon 64
Liability, Waterpowers Not a 372
Life of Wood Pipe, The 130
Life of Wood Stave Pipe, The 46

Page

Lighting as an Accident Preventive, Good 189
†Lighting, Better 286
Lighting Bureau Commercial Section National Electric Light Association, Organization of the 141
Lighting, Gilroy 473
†Lighting, Individuality in..... 77
*Lighting Installation, Novel and Effective 63
*Lighting of a Retail Store, Effective 87
Lighting Plant of Seattle, Municipal 375
*Lighting, Street 221
†Lighting Units, Self Contained.. 215
Lighting, Flash 69
†Line Construction, Public Regulation of 419
Load Factor, Increase to Decrease Deterioration of Electric Apparatus 224
Los Angeles Automatic Telephone System 236
Los Angeles Edison Condemnation Hearing 20, 57, 98
Los Angeles Jovian Electric League 79, 96, 120, 140, 160, 179, 194, 216, 235, 269, 304, 325, 344, 363, 381, 398, 420, 476
Los Angeles, Jovian Rejuvenation at 179
Los Angeles Jovian Singers, The Electrical Float of the..... 51
†Los Angeles, Natural Gas at.... 48
Los Angeles, New "Exide" Depot at 79
Los Angeles Section, A. I. E. E.. 251
Los Angeles Section American Society of Mechanical Engineers 269
Los Angeles, Technical Societies of 440

M

Maintenance of Resale Prices.... 146
Man's Efficiency 284
†Mapping Insulator Fields..... 474
Market for Irrigation Pumping, Prospective 465
*Marine Purposes, Diesel Engines Applied to 173, 190, 207
*Medlow Dam 358
Meeting Notices.....41, 60, 78, 96, 120, 140, 159, 178, 194, 216, 235, 251, 269, 288, 304, 325, 344, 362, 380, 398, 420, 440, 459, 476, 494
Melting of Silicon Steel, Vacuum. 137
†Menace of Uncontrolled Labor... 343
*Merced Falls Low Head Hydroelectric Plant..... 446
Merger 280
Metric System 285
*Military Engineering....292, 314, 338
*Million Volt Exposition Transformer 143
Mitigation, Electrolysis 75
*Modern Engines 70
Motor, The Capacity of..... 117
Motors, Concatenation of..... 137
*Mountain King Mining Company Power Plant 125
Municipal Inspection Bureaus, Functions of 22
Municipal Lighting Plant of Seattle 375
Municipal Ownership of Railways at San Francisco 435
Municipal Power Rates, Increase in 340
Municipal Utilities, Commission Regulation of 468
†Mutuality of Confidence..... 267

N

National Electric Contractors' Convention 198
National Electric Light Association, Organization of the Lighting Bureau Commercial Section 141
National Electric Range Campaign 334
National Electrical Safety Code, Apprehension Regarding..... 472
National Institute Meeting, Extraordinary 400
†National Water Law..... 38
†Navy, Engineering Advice for Army and 77
†Need for Teaching the Dealer.... 286
Francisco, Municipal 435
Need for a Consistent General State Policy as to Public Utilities 12
†Need for Employment Departments 233
†Need for Engineering Preparedness 475
Need for teaching the Dealers... 321
N. E. L. A. Convention, Preparations for 364
N. E. L. A. Great Western Power Company Section 325, 476

Page

N. E. L. A. Electric Range Committee 159, 433, *451, 466, 490
N. E. L. A. Electric Range Committee Meeting ..159, 433, *451, 466
N. E. L. A. Papers, Salient Features of 415, 423
Nevada Agricultural Demonstration Train, Utah 346
Nevada, Engineering Students, Celebration 269
New Catalogues 42, 79, 100, 101 140, 162, 195, 235, 270, 326, 363, 400, 441, 460
New "Exide" Depot at Los Angeles 79
News Notes 23, 43, 62, 80, 102, 122, 142, 161, 180, 199, 220, 236, 253, 272, 307, 365, 383, 401, 425, 443, 461, 478, 496
*New Path of Gold, San Francisco's 202
News of Arizona Corporation Commission 61, 270, 363, 477
News of California Public Service Commission 179
News of California Railroad Commission 121, 162, 217, 270, 306, 326 364, 381, 441, 459, 477
News of California Water Commission 421
News of the Idaho Public Utilities Commission 141, 162, 179, 270, 326, 400, 477
News of Oregon Public Service Commission....61, 195, 252, 381, 421
New Transformer Oil..... 460
*New Triangulation Signal Lamp. 374
New Zealand, New Hydroelectric Plants in 295
†Nineteen Hundred Fifteen..... 16
Ninth Annual Report Public Service Commission of Oregon.... 19
Northwest Electric Light & Power Association Convention. 325
*Norway and Sweden, Pacific Coast Electrochemical Possibilities, Compared with 164
*Novel and Effective Lighting Installation 63
Nullify a Franchise, A City's Right to 137

O

*Oakland's Auditorium, Illumination of 255
Oakland Joint Rejuvenation, San Francisco 477
Oakland Jovian Smoker..... 398
Obituary 40, 60, 78, 96, 140, 158, 250, 380, 458
Obligation, Employees' 247
†Occupational Versus Community Interest 456
Ocos Loses Its Electric Plant.... 137
Oil Gas Tar Analysis of..... 115
Oil, New Transformer..... 460
Oil, Origin of California..... 337
Oil Production Figures..... 115
Operation of Alternators, Parallel 351
Operation of Diesel Engines, Care and 14, 30
Oregon Association of Electrical Contractors and Dealers Constitution and By-Laws..... 196
Oregon Electrical Contractors & Dealers' Association 159 305, 380, 398
*Oregon, Feasibility of Electrochemical Industries at The Dalles 367
Oregon Irrigation Congress..... 41
*Oregon's Latent Waterpowers, Utilization of 275
Oregon Public Service Commission, News of 61
Oregon, River Surveys in Washington and 117
Oregon Society of Engineers.... .....78, 160, 269, 362
Oregon Water Code..... 108
Oregon Water Code, Validity of. 466
Origin of California Oil..... 337
†Other Side of Public Relations.. 378
Organization of Engineer Battalion for Mexican Service..... 491
Organization of the Lighting Bureau Commercial Section National Electric Light Association 141
Out of Doors Hydroelectric Plants 486
Ownership of Railways at San
*Ovens at Salt Lake City, Electric Bake 37

P

*Pacific Coast Electrochemical Possibilities 164
*Pacific Coast Hydroelectric Development 403

Page

Pacific Gas & Electric Company's New Policy Regarding Sale of Electric Appliances and Ranges 382
Pacific Coast Railway Electric Club 344
*P. P. I. E. Auxiliary Water Supply 81
Pacific Division of the American Association for Advancement of Science 305
Papermaking, Waterpower for... 448
†Parable of the Talents..... 342
Parallel Operation of Alternators 351
†Pension Plan, Commendable..... 322
Pep's Family Tree 414
Personals 18, 40, 60, 78, 96, 120, 140, 158, 178, 194, 216, 234, 250, 268, 288, 304, 324, 344, 362, 380, 398, 420, 440, 458, 476, 494
Phosphate Resources, Idaho..... 243
Photometry of the Gas-filled Lamp 318
*Pig Iron 331
Pinchot Opposes Water Power Legislation 195
Pinchot, Answer to Gifford..... 387
†Pioneer Engineer, Honor for..... 418
†Plain Writing, The Importance of 139, 174
Plants, Fire Protection of Electric 392
Plating, Cobalt 137
Pole Construction, Joint..... 117
Pole Nuisance, Electric..... 133
Polarization of Leclanche Cells.. 15
Portable Telephone 314
Portland Electrical Contracts.... 219
Portland, Oregon Electrical Contracts 121
Portland Railway, Light & Power Evaluation 488
Portland Section A. I. E. E. & N. E. L. A.....41, 61, 78, 96, 141, 159, 178, 216, 251, 325, 362, 399, 420
*Portland, Silver Thaw at....154, 155
Poster Competition, America's Electrical Week 289
Postal Savings Act..... 466
*Potential About High Voltage Line Insulators Distribution of. 468
Potential Waterpower, Undeveloped 137
*Potentiometer in High Voltage Investigations, The Condenser. 116
Powdered Coal 168
†Power Development, The Decline in Water 118
†Power of Knowledge 119
*Power Plant, Mountain King Mining Co. 125
†Power Plants, Scientific Management of 492
*Power Project, Report on the Columbia River 9, 33, 54, 67, 90, 110, 135, 151, 169, 187 210, 225
Power Rates, Increase in..... 340
Power Sites Prohibiting Capitalization of 146
*Power Syphon, Lewiston-Waha.. 64
Preparations for N. E. L. A. Convention 364
†Preparedness, Engineering 157
†Preparedness, Dual 397
Preparedness, Industrial 455
†Preparedness, Need for Engineering Preparedness 475
Preparedness, S. F. Engineers Discuss 362
Preventive, Good Lighting as an Accident 189
Problems of Inductive Interference 298, 319, 340
*Problem of Flood Control.135, 151, 169
†Problem, Selling 397
Producer Gas Power from Northwestern Coals 264
†Profit from the Junk Pile..... 396
†Profitable Electrical Contracting. 474
Prohibiting Capitalization of Power Sites 146
*Prospective Market for Irrigation Pumping 465, 489
Protection of Electric Plants, Fire 392, 411
†Public Regulation of Line Construction 419
Publications Received..61, 79, 100, 271
†Public Confidence, An Example in 302
†Public, Getting Along With the.. 302
†Public Relations, Other Side of.. 378
†Public Use, What Constitutes.... 95
Public Utilities Act Is Upheld, California 79
Public Utilities, The Need for a Consistent General State Policy as to 12
Pumping by Electric Power, Irrigation 259
Pumping Equipment, Costs of Electric Irrigation 473
Pumping in Idaho, Electric Irrigation 227, 241
Public Interest in the Waterpower Impasse, Stimulating 172

Page

*Pumping Plant Transformer Equipment. 167
*Pumping, Prospective Market for 465, 489
Purification Plant, Field Water.. 318

R

Radiations, Ultra-Violet..... 224
Railroad Commission, News of California.....121, 162, 217, 270, 360, 328, 364, 381, 441, 459, 477
Railways at San Francisco, Municipal Ownership of..... 435
Railway Equipment Required for Movement of Military Units at War Strength 437
Range Campaign, National Electric 334
*Range, Combination Gas and Electric 460
Range Committee, Report of N. E. L. A. Electric 433, *451, 466, 490
Ranges, Domestic Electric 327
†Range, Increasing the Range of the Electric Range 176, 231
†Range Week, Suggestions for an Electric .....
†Rate Decision, The San Joaquin.. 303
Rate-making, Depreciation as an Element in 184
Refillable Fuses 69
Recorders, Trouble with CO_2.... 389
†Regulation of Line Construction, Public 419
Regulation of Municipal Utilities, Commission 468
Regulation of Telephone Companies in Utah 381
Rejuvenation, San Francisco-Oakland Joint 477
†Remarkable Engineering Feat... 322
Report, A Commendable Inspection 321
Report of the Bureau of Standards, Annual 75
Report of N. E. L. A. Electric Range Committee..433, *451, 466, 490
*Report on Columbia River Power Project 9, 33, 54, 67, 90, 110, 135, 151, 169, 187, 210, 225
Resale Prices, Maintenance of.... 146
†Research, Cash Value of Engineering 266
Resistivity of Soils..... 57
†Reward of Service 39
Rhyme of the Electric Range.... 373
Right to Nullify a Franchise, A City's 137
*Rittman Process, Commercial Success of 183
River Surveys in Washington and Oregon 117
Rocky Mountain Association of Municipal Electricians 120
Rules, Committee on Electrical Safety 268
†Rural Credits, Standardizing.... 58

S

†Safe Absorption of Industrial Transients 249
Safety Code, Apprehension Regarding the National Electrical 472
Safety Orders, Hearing on Engine 326
Safety Rules, Committee on Electrical 268
Sale of Electric Appliances and Ranges, P. S. & E. Co..... 382
Sales Campaign, Co-operative Electric Range 285
Salient Features of N. E. L. A. Papers 415, 423
*Salt Lake City Electric Bake Ovens at 37
Sales Value of Illumination 395
*Salt Lake City, Electric Cooking School at 375
San Diego Company's Stock Offered Locally 240
*San Francisco Bay, Laying Power Cable Across 428
S. F. Electrical Contractors.363, 440
S. F. Elec. Dev. and Jovian League 60, 78, 96, 121, 140, 159, 178, 194, 216, 235, 251, 269, 304, 325, 344, 399, 420, 440, 459
*San Francisco's Electrical Fire Protection 45
San Francisco Engineer's Club.. 398
S. F. Engineers Discuss Preparedness 362
S. F. Jovian Smoker 251
San Francisco, Municipal Ownership of Railways at..... 435
*San Francisco's New Path of Gold 202

Page

San Francisco-Oakland Joint Rejuvenation 477
S. F. Section, A. I. E. E..... 251
S. F. Section A. S. M. E..... 381
*San Fransquito Plant..... 481
†San Joaquin Rate Decision..... 303
†Science, Humanizing 361
†Scientific Management of Power Plants 492
Seattle, Break in the Pipe Line. 212
Seattle, Municipal Lighting Plant 375
†Self-Contained Lighting Units... 215
Selling Agreement, Legality of Exclusive 340
†Selling Problem 397
Senate Water Bill 147
†Service Continuity During Storms 94
†Service, Reward of..... 39
Shale, Gasoline from 243
†Shields Bill 233
*Signal Lamp, New Triangulation. 374
Silicon Steel 473
Silicon Steel, Vacuum Melting of. 137
*Silver Thaw at Portland..... 154
*Simpson, T. W..... 186
Slump in Hydroelectric Construction 109
Smelter, Electric Copper..... 231
Smelting, Electric Iron Ore..... 15
Smoker S. F. Jovian 251
Snow-Flake in Industry..... 52
Soils, The Resistivity of..... 57
Some Faults of the Small Electric—Arc Furnace..... 376
Some Problems of Inductive Interference 298, 319 340
Southern California Edison Condemnation Hearing 20, 57, 98
Southern California, Jovian Elec. League of 41, 61
Spark Ignition 117
Splicing, Underground Cable..... 265
†Stabilizing an Industry..... 248
Standard Accounting Methods... 285
†Standardizing Rural Credits..... 58
State Policy as to Public Utilities, The Need for a Consistent General 12
*Steam Condensers and Condenser Tubes 73
Steel Industry, Electric..... 117
Steel, Silicon 473
Stimulating Public Interest in the Water Power Impasse..... 171
*Street Lighting 221
Substituting Copper for Aluminum 72
†Substituting, Improvement Through 322
Success, The Attributes of..... 93
*Success of Rittman Process, Commercial 183
†Suggestions for an Electric Range Week 323
†Supply Costs, Increase in..... 232
Surveys in Washington and Oregon, River 117
*Sweden, Pacific Coast Electrochemical Possibilities, Compared with Norway and..... 164
*Syphon, The Lewiston-Waha Power 64

T

Tahiti Wireless Communication with 246
†Talents, Parable of the..... 342
Tar, Analysis of Oil Gas..... 115
Tax 359
†Teaching the Dealer, Need for... .....286, 321
†Technical Journal as a Catalytic 287
Technical Societies of Los Angeles 440
Telegraphy and Telephony, Wireless 226
Telephone Companies of Utah, Regulation of 381
Telephone, Portable 314
Telephone, War Tests of..... 374
Telephony, Wireless Telegraphy and 226
Tests of Telephone, War..... 374
*Thaw at Portland, Silver..... 154
Thermal Unit, The British..... 53
Trade Notes 24, 42, 79, 101, 121, 141, 162, 179, 198, 216, 234, 250, 270, 306, 329, 346, 363, 382, 422, 440, 458, 477
Tramp Life de Luxe..... 69
*Transformer Equipment, Pumping Plant 167
*Transformer, Million Volt Exposition 143
Transformer Oil New..... 460
‡Transformers, An Improved Method of Winding 101
Transmission Through Boiler Tubes, Heat 147
*Triangulation Signal Lamp..... 374
Trouble With CO_2 Recorders..... 389

Page

U

Ultra Violet Radiations 224
†Uncontrolled Labor, Menace of.. 343
Underground Cable Splicing..... 265
Undeveloped Potential Water Power 137
Use for Electric Air Heater, Hospital Finds Novel..... 442
†Uses of a Display Room..... 360
Utah Electric Club 399
Utah-Nevada Agricultural Demonstration Train 346
Utah, Regulation of Telephone Companies in..... 381
Utah Society of Engineers..... 344
Utilities, Commission Regulation of Municipal 468
†Utility by Beauty, Enhancing.... 192
†Utility Contracts, Futility of Illegal 360
*Utilization of Oregon's Latent Waterpowers 275

V

Vacuum Melting of Silicon Steel 137
Validity of the Oregon Water Code 466
†Valuation Fundamentals 76
Value of Illumination, Sales.... 395
Vessels, Electrical Installation on Inspected 450

W

*Waha Power Syphon The Lewiston 64
War Strength, Railway Equipment Required for Movement of Military Units at 437
War Tests of Telephone..... 374
Washington, A. I. E. E. Meeting. 305
Washington and Oregon River-Surveys in 117
Washington Contractors Organize 218
†Washington Water Power Conference 378
Water Bill, Senate 147
Water Code, Oregon..... 108
Water Code, Validity of Oregon. 466
Water Commission, Application to 41, 99, 181, 252, 345
Water Heaters, Feed..... 137
*Water Heating "Off the Peak," Keeping Electric 186
Water, in Irrigation Channels, Flow of 212
†Water Law, National 38
†Water Power Bill, Improved.... 139
†Waterpower Conference, Washington 378
Water Power for Paper Making 448
†Waterpower Development, The Decline in 118, 174
Waterpower Development Association 191
Waterpower Impasse, Stimulating Public Interest in the..... 172
Water Power Legislation, Pinchot Opposes 195
Waterpower, Undeveloped Potential 137
Waterpowers Not a Liability.... 372
*Waterpowers, Utilization of Oregon's Latent 275
Water Purification Plant, Field.. 318
Water Rights as a Liability.... 335
*Water Supply, P. P. I. E. Auxiliary 81
†Weather and the Engineer..... 493
†Western Chemical Industry, Electrifying 177
*Western Electrometallurgy, Feasibility of 237, 262, 282, 296, 316, 331
Western Pre-Eminence in Hydroelectric Development..... 146
†What Constitutes Public Use.... 95
†What Is an Engineer?..... 119
‡Where Ignorance is not Bliss... 59
‡Winding High Tension Transformers, An Improved Method of 101
Window Display Schedule..... 495
"Wire-at-Home" Campaign 147
"Wire Your Home" Month..... 213
Wireless Communication with Tahiti 246
Wireless Telegraphy and Telephony 226
Wise and Halsey Plants, Construction Started on..... 179
†Word of Advice to the Electrical Dealer 439
†Writing, The Importance of Plain 139, 174

Authors' Index

	Page
Aitchison, Clyde B.	12
Alcutt, Chester T.	468
Allan, Percy	358
Bangs, John Kendrick	435
Baum, F. G.	224
Beals, Edward A.	9
Beckman, J. W.	164, 230
Bell, R. N.	243
Bennett, Ralph	486
Booth, P. H.	454
Brunkow, Herbert E.	115
Burns, Jas.	265
Carpenter, H. V.	264
Carrell, John	45
Chapman, C. C.	355
Cheney, M. E.	392, 411
Cleary, G. A.	436
Coldwell, O. B.	449
Corbett, L. J.	351
Cornell, L. P.	428
Cunningham, Ralph E.	167
Dickie, Geo. W.	455
Eaton, E. C.	81
Ferris, L. P.	298
Fischer, E. G.	374
Fisken, J. B.	319
Greiser, V. H.	320
Griswold, A. H.	298
Grunsky, C. E.	372
Hand, H. W.	389
Hannon, B. E.	280
Harrisberger, John	403
Harza, L. F.	9, 33, 54, 67, 90, 110, 135, 169, 187, 210, 225
Howe, Jared	184
Hurley, Edward N.	285
Jacobs, Jos.	465, 489
Jones H. S.	14, 30, 50, 70, 88, 110, 148 173, 190, 207
Kalenborn, A. S.	446
Keeney, Robert M.	237, 262, 282, 296, 316, 331
Kempston, Arthur	22
Kennedy, S. M.	231
Koontz, J. A.	428
Larner, Chester W.	389
Lewis, John H.	275
Lindstrom, A. G.	143
Lisberger, S. J.	202
Longmuir, Geo. D.	259
Lyon, Dorsey A.	237, 262, 282, 296, 316, 331
MacDonald J. E.	133
Martin, J. C.	319
Mastick, R. W.	298
McClelland R. J.	472
McKnight, W. M.	376
McLean, G. B.	231
Megson, J. E.	14, 30, 50, 70, 88 110, 148, 173, 190, 207
Mendenhall, Bayard W.	37, 375
Merwin, L. T.	340
Myers, Romaine W.	255
Nichols, W. W.	389
Nightingale, E. L.	442
Nims, F. D.	320
Oakes, C. E.	116
Park, Capt. Rich.	292, 314, 338
Pearson, Benjamin F.	52
Peaslee, W. D.	116, 174
Putnam, C .R.	231
Putnam, C. R.	231
Randolph, John A.	213
Ryan, Harris J.	174, 468
Skolfield, W. K.	468
Sprout, Sidney	309
Stafford, O. F.	367, 390, 411, 430
Stickney, G. H.	485
Thelan, Max	395
Townley, Calvert	389
Van Norden, Rudolph W.	125
Wallace, W. T.	227, 241
Walton, S. V.	231, 321
Way, J. E.	389
Wilcox, E. A.	231, 349
Wood, A. F. C.	73